

## REMARKS

The Office Action mailed October 4, 2005 considered claims 1-11, 15-19, 24 and 26-28.<sup>1</sup> By this paper, claims 1, 15, 24 and 26 have been amended and new claim 29<sup>2</sup> has been added such that claims 1-11, 15-19, 24, and 26-28 remain pending, of which claims 1, 24, and 26 are the only independent claims under consideration. Claim 15 was objected to. Applicants have amended claim 15 to depend from claim 1 to overcome the Examiner's objection.

The invention is generally directed to facilitating domain name resolution for computer devices whose native host name data protocol is not compatible with host name data resolution protocols across a particular connection on a network. The invention allows for a replacement host name resolver to be used in conjunction with the native host name resolver to resolve host names by the replacement host name resolver being able to request domain names over a communications link connecting the requesting computer system to the network. In particular, each of the claims recites embodiments where a computer system requesting domain name resolution is assigned as its own name server. Host name data is routed from the requesting computer system native host name resolver using a protocol incompatible for resolution of the host name by a DNS server, to the requesting computer system, to a replacement host name resolver on the requesting computer system, where the host name data is sent using a second protocol that is compatible for resolving host name data over a communication link connecting the requesting computer system to the network. A resolved (not mapped) address is received at the native host name resolver corresponding to the host name data.

For example, claim 1 is directed to a method implemented by a computer system that requests domain name resolution. The method includes assigning the requesting computer system as a name server for the requesting computer system. The method further includes requesting resolution of a host name by sending host name data from the native host name

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<sup>1</sup> Claims 1-11, 16-19, 24, and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hovell et al. (US 2004/0093434) hereinafter *Hovell* in view of Aziz et al. (US 6,119,234) hereinafter *Aziz*. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Hovell* and *Aziz* in further view of Onweller (5,799,016), hereinafter *Onweller*. Although the prior art status of the cited art is not being challenged at this time, Applicants reserve the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

<sup>2</sup> Support for the amendments and new claim are found throughout the specification, but with particularity at [0005], [0011], and [0021].

resolver in a first protocol back to the requesting computer system as the name server assigned for the requesting computer system. The host name data is compatible for resolution of the host name by a DNS server, however, the first protocol is not compatible for resolving host name data over a communications link connecting the requesting computer system to the network. The method further includes monitoring a name resolution of the requesting computer system for receiving the host name data in the first protocol from the requesting computer system. The host name data in the first protocol is rerouted to a replacement host name resolver in the requesting computer system. The host name data from the replacement host name resolver is sent using a second protocol, which is compatible for resolving host name data over a communications link connecting the requesting computer system to the network, to a module for resolving the host name data. A resolved (not mapped) address is received corresponding to the host name data at the native host name resolver.

Claim 24 is similar to claim 1, but includes a slightly different scope and functional 'step for' language, as opposed to some of the non-functional 'act of' language used in claim 1.

Claim 26, the last independent claim, is directed to a computer program product with computer executable instructions for performing a method similar to that of claim 1.

Applicant respectfully submits that all of the pending claims are allowable and distinguished over the art of record. In particular, the claims of the present application recite elements that are neither anticipated by nor made obvious by the art of record.

Applicants submit that the Examiner has made inconsistent statements in the rejections based on *Hovell* where the inconsistencies illustrate why *Hovell* does not anticipate each and every element of the claims. For example, while the Examiner readily admits that *Hovell* "fails to disclose an act of assigning the requesting computer system as a name server for the requesting computer system," the Examiner nonetheless maintains that *Hovell* discloses an act of requesting resolution of a host name by sending host name data in a first protocol to the requesting computer system by sending the host name data to the name server assigned for the requesting computer system. This analysis simply does not make sense. For the requesting system to request resolution of a host name by sending the request to the sending system as the name server for the requesting system, the requesting system must be assigned as the name server for the requesting system. As such, it is simply not possible for *Hovell* to disclose "requesting resolution of a host name by sending host name data in a first protocol to the

requesting computer system by sending the host name data to the name server assigned for the requesting computer system" when, as the Examiner readily admits, it "fails to disclose an act of assigning the requesting computer system as a name server for the requesting computer system."

Nonetheless, to more fully illustrate the novelty of the claims, Applicants have amended the independent claims. In particular, the independent claims as now amended each recite: receiving a resolved address at the native host name resolver of the requesting computer system corresponding to the host name data. In addition, each of the amended independent claims makes it clear that "requesting resolution" is performed by a native host name resolver at the requesting computer system.

In light of the Examiner's characterization of *Hovell*, Applicants are faced with a difficult task of providing arguments not knowing exactly what elements of *Hovell* that the Examiner is asserting against the claims. In this regard, Applicants respectfully request that if the Examiner maintains the current rejections, or provides new rejections, that the Examiner specifically point to the referenced elements of the cited art and the specific cited paragraphs of the cited art that purportedly teach or suggest the claimed invention, such that the Applicant will have a fair opportunity to respond.

Notwithstanding the ambiguity with regard to which portions of the disclosure the Examiner is relying on, and the ambiguity with regard to how the art is being interpreted, Applicants will attempt to demonstrate that under any combination of various possible interpretations of the art, that *Hovell* in combination with *Aziz* fails to anticipate or make obvious the claimed invention.

For example, each of the claims recites "receiving a resolved address at the native host name resolver of the requesting computer system corresponding to the host name data." In direct contrast, assuming that the Examiner intends the requesting computer system to be host C illustrated in *Hovell*, the system disclosed by *Hovell* discloses at [0041] that a translator assigns an IPv4 address from a pool of available arbitrary addresses to a returned IPv6 address for a host A. As illustrated by *Hovell* at [0041], this assigned and completely arbitrary address is then returned to a host C that had requested domain name resolution. Thus, host C has not received a resolved address, but rather has received a mapped address. For host C to communicate with host A, host C must send all communications through the translator 101 so that the arbitrary IPv4 address can be translated to the IPv6 address that is the actual address of host A. See *Hovell* at

[0041]-[0046] and in particular [0044]. In direct contrast, the present invention includes an act whereby a native host name resolver at the requesting host receives the actual assigned address (the resolved address) of the host for which domain name resolution was requested. This allows the hosts to communicate with one another without the use of a translator as is required by the apparatus illustrated in *Hovell*.

The Examiner cites *Aziz* for showing a loopback. However, *Aziz* when combined with *Hovell* still results in a system where mapped addresses, as opposed to resolved address, are received. For example, when *Aziz* and *Hovell* are combined, a query is received that is looped back to a resolver at an authorized client. *Aziz* at col. 8, lines 29-30. When the resolver receives the query it forwards it to the name server. *Aziz* at col. 8, lines 39-40. Referring now to *Hovell*, requests forwarded to the name server 106 are forwarded through the translator 101 where mapped address are obtained and returned back to the requesting client. *Hovell* at [0041]-[0046] and in particular [0044]. Thus, the combination of *Hovell* and *Aziz* still fails to disclose receiving a resolved address.

It is possible that the Examiner is interpreting the combination of *Hovell* and *Aziz* such that the authorized client in *Aziz* includes host C and translator 101 where the translator 101 is part of the resolver in *Aziz*. However, in this case, the combination nonetheless fails to disclose receiving a resolved address at the native host name resolver of the requesting computer system corresponding to the host name data. Host C, where any native host name resolver would be located, receives a mapped address and not a resolved address as is recited by the claims of the present application. As such, even using this interpretation of *Hovell* and *Aziz*, the combination still fails to disclose or suggest what is recited by the claims.

*Onweller* is cited by the Examiner to show UDP and TCP protocols. *Onweller* does not compensate for the deficiencies of *Hovell* and *Aziz*, however, as it relates to at least the independent claims of this application.

Furthermore, although the foregoing remarks have been focused primarily on the independent claims, it will be appreciated that all of the rejections and assertions of record with respect to the independent claims, as well as the dependent claims, are now moot, and therefore need not be addressed individually. However, in this regard, it should be appreciated that Applicant does not necessarily acquiesce to any assertions in the previous Office Action that are

not specifically addressed above, and hereby reserves the right to challenge those assertions at any appropriate time in the future, should it arise, including any official notice.

While not necessary, applicants particularly point out new claim 29. In particular new claim 29 recites that the requesting computer system is a single physical device. Thus, any interpretation by the Examiner of *Hovell* where a requesting computer system includes host C and the translator 101 is outside of the scope of what is recited by claim 29. In particular, Figure 1 of *Hovell* illustrates that host C and translator 101 are each separate physical devices interconnected via a network connection NW1. This is in direct contrast to what is recited by claim 29 of the present application.

In the event that the Examiner finds any remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 10 day of November, 2005.

Respectfully submitted,



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